

Remarks

Claims 1-27 are pending in this application. Independent claims 1, 13, 26, and 27 have been amended to more particularly point out the invention.

The cited prior art fails to describe or suggest the following: context resources in a channel adapter of the first node used to service the data access task are pre-emptible after only partial completion of the data access task between the first response and a first subsidiary request for use to support other data access tasks by the channel adapter performing a context switch; context resources in the channel adapter used to service the data access task are pre-emptible between a subsidiary response and a subsequent subsidiary request for use to support other data access tasks by the channel adapter performing a context switch; the other data access tasks are of the type including a first request, a first response, at least one subsidiary request, and at least one subsidiary response, the context resources used to service the other data access tasks are pre-emptible. Independent claim 25 recites "pre-empting context resources associated with issuance of the first remote access command from the first node prior to completion of the task associated with the first remote access command; issuing a second remote access command from the first node using the pre-empted context resources."

Claims 1-11, 13-23, and 25-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Saha (US Pub. No. 2004/0117375) in view of Boyd (US Pub. No. 2004/0049580).

Saha describes direct memory access for performing database operations between two or more machines. Paragraph 59-60 and Figure 5 describe a series of data transfers and acknowledgments. Each data transfer is followed by an acknowledgment when all of the data held in the buffer is used. Upon receiving the acknowledgment, the client can then place more data into the buffer.

The Examiner acknowledges that Saha does not disclose a data access task. Boyd does describe work queue entries. The work queue entries in Boyd do not involve subsidiary requests and responses as claimed. Boyd discloses a work queue entry, but does not disclose a data access task as claimed. The claimed data access task is partially completed by the first response and further completed by each subsidiary response.

For teaching pre-emption, the Examiner only relies on Saha. The portions of Saha referred to by the Examiner do not describe such pre-emption, but only describe data buffering in a series of separate data transfers and acknowledgments. That is, there is no pre-emption of context resources, the client only places more data into a buffer when the buffer is empty without the occurrence of any pre-emption. Note, at paragraph 63, Saha describes asynchronous transfer where all the data that needs to be transferred through the allocated memory is sent once to the queue, and the queue holds the data for the allocated memory until additional data can be distributed within the allocated memory. In all implementations in Saha, there is not pre-emption of context resources.

In the final Office Action mailed May 25, 2010, the Examiner, in response to Applicant's arguments, states "Saha in 59-60 clearly discloses that upon data being transferred from the sender (a server that data is being read from for example) to the client in buffers (or chunks) and used at the client side, the client acknowledges the transferor that the buffer is now empty (pre-empting the memory resources associated with the complete data chunk of one task transferred) before new subsequent data chunk can be transferred." Applicants respectfully disagree. There is no teaching of pre-emption to support other data access tasks as claimed. The Examiner further states "the memory blocks are pre-emptible once the data block transfer is finished." Applicants respectfully disagree. The memory blocks in Saha are not pre-emptible between chunks. The claims have been amended to clarify that other data access tasks are supported by the pre-emption. Saha, at most, refills the memory to continue the transfer. This does not support an other data access task and is not pre-emption as claimed.

Saha does not teach pre-emption between chunks. Further, to the extent the Examiner states that the memory blocks are emptied between data blocks, the claims have been

amended to clarify that the other data access tasks (serviced during pre-emption/context switch) are of a specific type, and thus are not merely another chunk of data.

For reasons given above, independent claims 1, 13, 26, and 27 are believed to be in condition for allowance. Regarding independent claim 25, this claim recites pre-empting context resources prior to completion of the task associated with the first remote access command. This subject matter is not described or suggested in the prior art.

Claims 12 and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Saha in view of Boyd, further in view of Turner. Claims 12 and 24 are dependent claims and are also believed to be patentable.

Respectfully submitted,

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